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(71) Applicant (for all designated States except US): **EM-PRESA BRASILEIRA DE COMPRESSORES S.A.-EMBRACO** [BR/BR]; Rua Rui Barbosa, 1020, CEP-89219-901 Joinville - SC (BR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **RIBEIRO DUARTE, Ronaldo** [BR/BR]; Rua Henrique Miers, 574, apto.05, CEP-89218-600, Joinville, SC (BR).

(74) Agent: **DANNEMANN, SIEMSEN, BIGLER & IPANEMA MOREIRA**; Caixa Postal 2142, Rua Marquês de Olinda, 70, CEP-22251-040- Rio de Janeiro- RJ (BR).

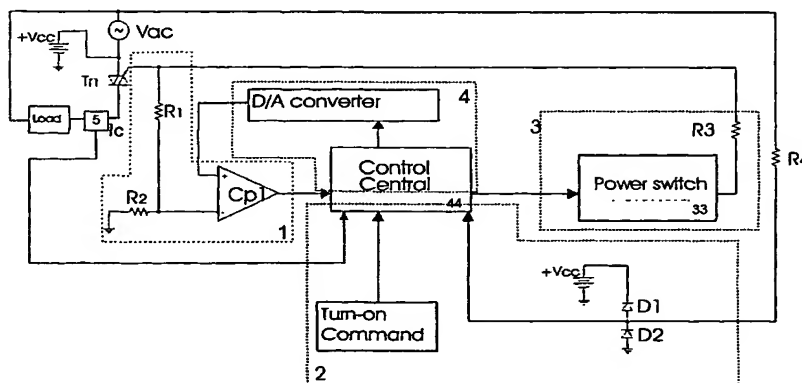
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(54) Title: A SYSTEM AND A METHOD OF CONTROLLING THE TRIGGERING OF A TRIAC



(57) Abstract: The present invention relates to a system of controlling and triggering a TRIAC as well as to a method of controlling the triggering of a TRIAC, by actuating a load with any power factor from a single short-duration pulse at the gate of the TRIAC. In order to make use of a single comparator (CP₁) and also to operate without limitation at the current level (i_c), a system of controlling and triggering a TRIAC (TR) is foreseen, the TRIAC comprising a gate (G), the TRIAC (TR) being connected to a load, the gate (G) being electrically connected to a control unit (4), which actuates the TRIAC (TR) for selectively applying a network voltage (V_{AC}) to the load and enabling the circulation of an electric current (i_c) in the load, the system comprising a gate voltage detection unit (1), a control unit (4), the gate voltage detection unit (1) being electrically connected to a control unit (4), the control unit (4) establishing a gate (G) voltage limit value (+limit, -limit) and generating a pulse at the gate (G) of the TRIAC (TR) to keep it in conduction, the pulse at the gate (G) being generated from a comparison between the voltage limit value (+limit, -limit) established by the control unit (4) and a voltage measured at the gate (G) from the gate voltage detection unit (1), the control unit (4) measuring the electric current (i_c) and adjusting the voltage limit value (+limit, -limit) in a way proportional to the current (i_c) value measured. A method is also provided for controlling the triggering of a TRIAC (TR) in order to actuate the system of the present invention.

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